

THE SPINOSE EAR TICK IN WASHINGTON<sup>1</sup>E. P. BREAKEY<sup>2</sup> AND HAROLD PROPP<sup>3</sup>

Ticks collected from the ears of cattle on the A. D. Olson Ranch near Beverly, in central Washington, in November, 1949, were referred to the senior author's attention on February 8, 1950. They were tentatively identified as the spinose ear tick, *Otobius megnini* (Dugès). Immediately, specimens were sent to Dr. F. C. Bishopp, Assistant Chief, Bureau of Entomology and Plant Quarantine, who verified our determination.

Dr. Bishopp stated (*in litt.*), "It is unusual to have a general infestation of this tick as far north as Beverly, Washington, although it has been taken on several occasions in the state of Washington."

Dr. Bishopp also asked if any of the cattle on the ranch had been brought in from the south, since the species is native to the southwestern United States.

In the meantime, Dr. M. O. Barnes, Supervisor, Division of Dairy and Livestock, Washington State Department of Agriculture, Olympia, had been questioned regarding the presence of the spinose ear tick in Washington. Dr. Barnes stated (*in litt.*), "Several years ago, I had an opportunity to investigate severe tick infestation in the ears of cattle in eastern Washington; however, it was doubted at that time if the tick could be identified as the spinose ear tick."

When A. D. Olson, owner of the cattle, was questioned regarding the history of the infestation, he stated (*in litt.*), "We have been running livestock in this locality for 20 years. We have been running cattle for the last five years and sheep fifteen years prior to that. We have not shipped in any stock from any southern states. We have always had ticks here but the ear tick has been bothering us only about two years. The ear tick infestation was heavier this year than in previous years. We did not examine the sheeps' ears as they did not give us trouble, but we have always found them in the dogs' ears."

David H. Brannon, Extension Entomologist, State College of Washington, believes that the spinose ear tick has been present in central Washington for a number of years. Recently, he displayed

<sup>1</sup>Scientific Paper No. 973, Washington Agricultural Experiment Stations, Institute of Agricultural Sciences, State College of Washington, Pullman.

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some specimens of this tick which he had mounted in plastic for the purpose of acquainting county agents and ranchers in the area with the appearance of the pest. A few days later, Brannon wrote as follows: "In going over our insect identification record in the office, I find that Laurel Smith (Brannon's predecessor) reported the spinose ear tick on September 3, 1942. The identification was made by Dr. Roy D. Shenefelt. The ticks were collected from cattle near Quincy. They were sent to Laurel Smith by D. Sinclair through L. R. Nicholson from Ellensburg. Smith states that four cattle had died from the effects. Smith also notes, "This is the first record I know of from this state. It has been recorded from Alberta. Insect Pest Survey has been notified and any records of previous infestations from the state requested." This is the only record we have in our files on the spinose ear tick other than the specimens I showed you when I was in Puyallup."

The specimens sent to Dr. Bishopp for identification were slightly engorged nymphs. It appears that we are dealing with an infestation that is of several years standing. Apparently the ticks pass the winter in central Washington as nymphs in the ears of the host, multiplication and dispersal taking place during the summer. It is not surprising that a southern species with such habits should be able to survive in more northern localities, since temperature changes on the host during the winter would not be great.

Bishopp and Trembley (1945) state "It is unlikely that *Ornithodoros megnini* will ever become permanently established or assume such importance as a livestock pest in states to the east of Texas or to the north of Oklahoma, New Mexico, Arizona, and California, with the possible exception of certain parts of southern Colorado, Utah and Nevada." Certain exceptions to this generalization are then given.

This tick was also collected by J. D. Gregson in December, 1943, in the ears of mountain goat at Bryant Creek, British Columbia. Since a nymph was taken from the ear of a cat in the same vicinity (Ewings Landing on Okanagan Lake, B. C.) on October 6, 1941, it also appears that the pest may be established there, at least temporarily.

#### LITERATURE CITED

- BISHOPP, F. C., and TREMBLEY, HELEN LOUISE  
1945. Distribution and Hosts of Certain North American Ticks, *Journal of Parasitology*, 31:44-46.